

29
27. A direct-current (DC) electric connector comprising:

an input-end provided for connecting to a DC voltage source and
an output end provided for connecting to an electrical device;

said input end includes an input high-voltage conductive layer and
an input low-voltage conductive layer having substantially a same
shape and same size and disposed in parallel to and insulated from
said input high-voltage conductive layer by an input insulation
layer;

said output end includes an output high-voltage conductive layer
and an output low-voltage conductive layer having substantially a
same shape and same size and disposed in parallel to and insulated
from said output high-voltage conductive layer by an input
insulation layer;

a high voltage connection layer interconnecting said input high
voltage conductive layer to said output high voltage conductive
layer; and

a low voltage connection layer of substantially same shape and size
with said high voltage connection layer and disposed in parallel to
and insulated from said high voltage connection layer
interconnecting said input low voltage input conductive layer to
said output low voltage conductive layer.

~~30~~ 28. The DC electric connector of claim ~~27~~²⁹ further comprising:

a first insulation and protection cover overlying said high voltage connection layer and a second insulation and protection cover overlying said low voltage connection layer; and

a clipping means for clipping and securely keeping said first insulation and protection cover and said second insulation and protection cover to pressing down and maintaining said connector as a clipped assembly.

~~31~~ 29. The DC electric connector of claim ~~27~~²⁹ wherein:

said input insulation layer and said output insulation layer composed of a material of Kapton.

~~32~~ 30. The DC electric connector of claim ~~29~~³¹ wherein:

said input insulation layer and said output insulation layer is an insulation layer with a thickness ranging between 0.01 to 0.05 millimeters.

~~33~~ 31. The DC electric connector of claim ~~28~~³⁰ wherein:

said first insulation and protection cover and said second insulation and protection cover are composed of a material of Kapton.

~~34~~ 32. The DC electric connector of claim ~~27~~²⁹ wherein:

said input insulation layer and said output insulation layer composed of a heat conductive insulation material.

~~35~~ 33. The DC electric connector of claim ~~28~~³⁰ wherein:

said first insulation and protection cover and said second insulation and protection cover are composed of a heat conductive insulation material.

34.

A direct-current (DC) electric connector comprising:

a first conductive means for connecting a high voltage terminal of a DC voltage source to a high voltage output terminal;

a second conductive means for connecting a low voltage terminal of a DC voltage source to a low voltage output terminal; and

said first conductive means and second conductive means are configured to produce respectively a first current-generated magnetic field and a second current-generated magnetic field wherein said first current-generated magnetic field is substantially cancelled out by said second current-generated magnetic field.

35.

The DC electric connector of claim 34 further comprising:

a heat conductive insulation means disposed between and insulating said first conductive means and said second conductive means.

~~36.~~ ³⁸

²⁹
~~35~~ The DC electric connector of claim ~~35~~ wherein:

said heat conductive insulation means disposed between and insulating said first conductive means and said second conductive means is a Kapton layer.

³⁹
~~37.~~

A method for manufacturing a direct-current (DC) electric connector comprising:

(a) forming an input end for connecting to a DC voltage source by forming an input high-voltage conductive layer and an input low-voltage conductive layer having substantially a same shape and size and disposed in parallel to and insulated from said input high-voltage conductive layer by an input insulation layer;

(b) forming an output end for connecting to an electronic device by forming an output high-voltage conductive layer and an output low-voltage conductive layer having substantially a same shape and same size and disposed in parallel to and insulated from said output high-voltage conductive layer by an input insulation layer;

(c) forming a high voltage connection layer interconnecting said input high voltage conductive layer to said output high voltage conductive layer; and

(d) forming a low voltage connection layer of substantially same shape and size with said high voltage connection layer and disposed in parallel to and insulated from said high voltage connection layer interconnecting said input low voltage input conductive layer to said output low voltage conductive layer.

~~38~~³⁹. The method of claim ~~37~~³⁹ further comprising:

(e) employing a first insulation and protection cover for overlying said high voltage connection layer and employing a second insulation and protection cover for overlying said low voltage connection layer; and

(f) employing a clipping means for clipping and securely keeping said first insulation and protection cover and said second insulation and protection cover to pressing down and maintaining said connector as a clipped assembly.

~~39~~⁴¹. The method of claim ~~37~~⁴¹ wherein:

said step of insulating said input high voltage conductive layer from said input low voltage conductive layer by said input insulation layer is a step of disposing a Kapton layer between said input high voltage conductive layer and said input low voltage conductive layer; and

said step of insulating said output high voltage conductive layer from said output low voltage conductive layer by said output insulation layer is a step of disposing a Kapton layer between said output high voltage conductive layer and said output low voltage conductive layer.

~~112~~ 40. The method of claim ~~39~~ wherein:

said step of placing said input insulation layer between said input high voltage conductive layer and said input low voltage conductive layer and said step of placing an output insulation layer between said output high voltage conductive layer and said output low voltage conductive layer is a step of employing an insulation layer with a thickness ranging between 0.01 to 0.05 millimeters.

~~113~~ 41. The DC electric connector of claim ~~38~~ wherein:

said step of employing said first insulation and protection cover and employing said second insulation and protection cover are steps of employing a material composed of Kapton to form said top and bottom insulation and protection covers.

~~111~~ 42. The method of claim ~~37~~ wherein:

said step of placing said input insulation layer between said input high voltage conductive layer and said input low voltage conductive layer and said step of placing an output insulation layer between said output high voltage conductive layer and said output low voltage conductive layer is a step of placing a heat conductive insulation layer.

~~43.~~ The method of claim 38 wherein:

said step of employing said first insulation and protection cover and said second insulation and protection cover are steps of employing said first insulation and protection cover and said second insulation and protection cover composed of a heat conductive insulation material.

~~44.~~ A method for manufacturing a direct-current (DC) electric connector comprising:

(a) forming a first conductive means for connecting a high voltage terminal of a DC voltage source to a high voltage output terminal;

(b) forming a second conductive means for connecting a low voltage terminal of a DC voltage source to a low voltage output terminal; and

(c) configuring said first conductive means and second conductive means to produce respectively a first current-generated magnetic field and a second current-generated magnetic field wherein said first current-generated magnetic field is substantially cancelled out by said second current-generated magnetic field.

~~45.~~ The method of claim 44 further comprising:

(c) placing a heat conductive insulation means between and insulating said first conductive means and said second conductive means.

~~46.~~ The method of claim 45 wherein:

said steps of placing said heat conductive insulation means between and insulating said first conductive means and said second conductive means is a step of placing a Kapton layer.

47. A data handling system comprising:

a power supply;

a microprocessor supported on a printed circuit board (PCB);

an electric connector connected between said power supply and said microprocessor for providing a direct-current (DC) to said microprocessor;

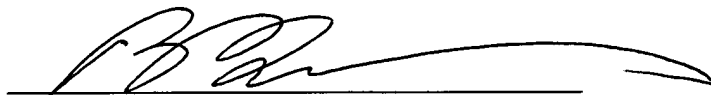
said electric connector includes a first conductive means for connecting a high voltage terminal of said power supply to a high voltage output terminal on said PCB;

a second conductive means for connecting a low voltage terminal of said power supply to a low voltage output terminal on said PCB;
and

said first conductive means and second conductive means are configured to produce respectively a first current-generated magnetic field and a second current-generated magnetic field wherein said first current-generated magnetic field is substantially canceled out by said second current-generated magnetic field.

Respectfully submitted,
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By



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